

REMARKS

By this amendment, claims 1-29 are pending, in which claims 1, 10, 18, and 27 are amended. No new matter is introduced.

The Office Action mailed April 24, 2003 rejected claims 1-29 as obvious under 35 U.S.C. § 103 based on *Simeonidou et al.* (US 6,249,620) in view of commonly-assigned *Liu* (US 5,914,798).

In the interest of expediting prosecution, Applicant has amended independent claims 1, 10, 18, and 27. Amended independent claims 1 and 18 recite “selectively receiving alarm signals from at least one of the first line terminating equipment and the second line terminating equipment; and **reconfiguring the submarine cable network based upon the receiving step in accordance with a predetermined service level agreement.**” Independent claim 10, as amended, recites “a network management module configured to receive selectively an alarm signal from the line terminating equipment and to **reconfigure the submarine cable network based upon the received alarm signal and a predetermined service level agreement.**” Also, amended independent claim 27 recites “means for **reconfiguring the submarine cable network based upon the received alarm signals and a predetermined service level agreement.**”

By contrast, *Simeonidou et al.* (per Abstract) is directed to a branching unit for an underwater wavelength division optical communications system. The branching unit comprises an arrayed-waveguide grating (AWG) and an optical switch. (Col. 2: 19-21) A WDM signal is received at the trunk input from the main trunk enters the center port of the AWG and as it continues it is demultiplexed into individual channels. (Col. 2:21-24) Depending on the state of the optical switch, each channel is then either dropped or returned to the main trunk. (Col. 2:25-27) As the signals proceed through the AWG, they are remultiplexed and exit via the trunk output for onward transmission on the main trunk. (Col. 2:32-34) *Simeonidou et al.*, however,

provides no disclosure or suggestion for the use of “alarm signals,” much less “reconfigure the submarine cable network based upon the received alarm signal and a predetermined service level agreement.”

The Office Action, on page 2, correctly acknowledges that “*Simeonidou et al.* differ from these claims in that *Simeonidou et al.* do not specifically disclose selectively receiving alarm signals from at least one of the first line terminating equipment and the second line terminating equipment,” and thus is forced to rely on *Liu* for such a supposed teaching, citing col. 2: 8-11 and col. 4: 19-22.

Liu (per Abstract) is directed to a system which receives alarms and port status messages from specialized switching nodes and terminal sites in an optical network, and this data is used by a Real-Time Multiple Wavelength Routing (RMWR) algorithm to select an alternate path based on wavelength information stored in centralized database. However, *Liu* provides no suggestion that the alarms can be used in the manner claimed, particularly in a submarine cable network.

In establishing the requisite motivation, it has been consistently held that the suggestion must stem from the prior art itself, as a whole. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Dow Chemical Co.*, 837 F.2d 469, 5 USPQ2d 1529 (Fed. Cir. 1988). In this instance, no motivation stems from either *Simeonidou et al.* or *Liu*.

Applicant, therefore, respectfully submits that the rejection is based on the improper application of hindsight considerations. It is well settled that it is impermissible simply to engage in hindsight reconstruction of the claimed invention, using Applicant’s structure as a template and selecting elements from the references to fill in the gaps. *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991). Recognizing, after the fact, that a modification of the

prior art would provide an improvement or advantage, without suggestion thereof by the prior art, rather than dictating a conclusion of obviousness, is an indication of improper application of hindsight considerations. Simplicity and hindsight are not proper criteria for resolving obviousness. *In re Warner*, 397 F.2d 1011, 154 USPQ 173 (CCPA 1967).

Even assuming the references of *Simeonidou et al.* and *Liu* were properly combined based on some teaching or suggestion in the references, and assuming the modifications proposed in the Office Action were justified by additional teachings or suggestions found in the references, even the combination does not render the claimed invention obvious. Specifically, none the references taken alone, or in combination, teaches or suggests “reconfiguring the submarine cable network based upon the receiving step **in accordance with a predetermined service level agreement.**” The Office Action, on page 3, states that *Simeonidou et al.* disclose “reconfiguration (restoration) to increase capacity according to the customer changing requirements (i.e., classes of service).” This general statement relating to “customer changing requirements” cannot be reasonably construed as the claimed “service level agreement.” Notably, the notion of reconfiguration based on customer changing requirements does not provide any mechanism for enforcing these requirements; the extrapolation that the Office Action has made is inappropriate based on the scant, generic statement. One of ordinary skill in the art would appropriate the engineering challenges involved with implementing mechanisms to enforce a service level agreement. Also, Applicant disagrees that “customer changing requirements” can be considered to disclose “classes of services” (as claimed in dependent claim 2).

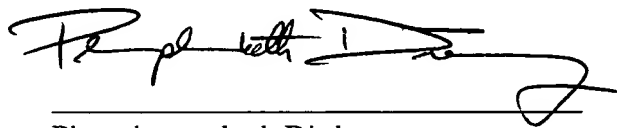
Therefore, independent claims 1, 10, 18, and 27 should be indicated as allowed. Also, dependent claims 2-9, 11-17, 19-26, 28, and 29 are allowable for at least the same reasons as their independent claims and are separately patentable on their own merits.

Therefore, the present application, as amended, overcomes the rejections of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at (703) 425-8508 so that such issues may be resolved as expeditiously as possible.

Respectfully Submitted,

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Date



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